

# Carbon Capture and Storage – Emerging risk or Opportunity?

Underwriting considerations - Michele Cibrario



# Energy Upstream is a complex industry driven by a multitude of factors

(many parties, many contracts, major investments, edge technologies, long lead times)

Key examples:

- a. Vertical integration of value chain of the Energy Industry
- b. National Oil Companies entrusted by Sovereign States to manage hydrocarbon resources
- c. Role of international oil companies as Operators of the Petroleum joint ventures
- d. Role of highly specialized contractors
- e. Giant size of each investment

The inclusion of CCUS possibly increases complexity and certainly further extends the value chain. Plus, we can argue vertical integration becomes even more important.

## **The insurance approach**

Insurance is typically bought locally in the form of an Energy Package mirroring the allocation of liabilities written in the Petroleum Contract.

Reinsurance is purchased internationally with rated securities.

Lead terms are issued by a reputable Leader.

# The ART of underwriting

Looking back

Looking forward



- Loss history (min. 5 years incl. DoL, cause of loss, insured, asset name, location)

- Age
- Recent upgrades/works
- Previous loss/stress history
- Type of wells

**Known re-injection technologies and extensive natural gas storage experiences**

vs.

**CCUS**

# Main underwriting considerations

- Type of asset / Field layout / Water depth
- Location (nature perils hazard, formation type)
- Age of facility and loss history
- List of wells (type, depth)
- Operator experience (relative to field: water depth, well depth, location)
- Type of activities and locations / Intervention capabilities
- "Who" is contracting the contractors and for how long
- Tows/Cargo/Ancillary coverage requirements
- Amendments to standard wordings (CoW extensions, GOM WS exclusion, etc...)
- War and terrorism
- Commercial considerations: capacity required, market dynamics, acquisition costs, taxes, original policy requirements.

**When we write a reinsurance portfolio, we are underwriting You!  
This is a long-term relationship of trust that we build together.**

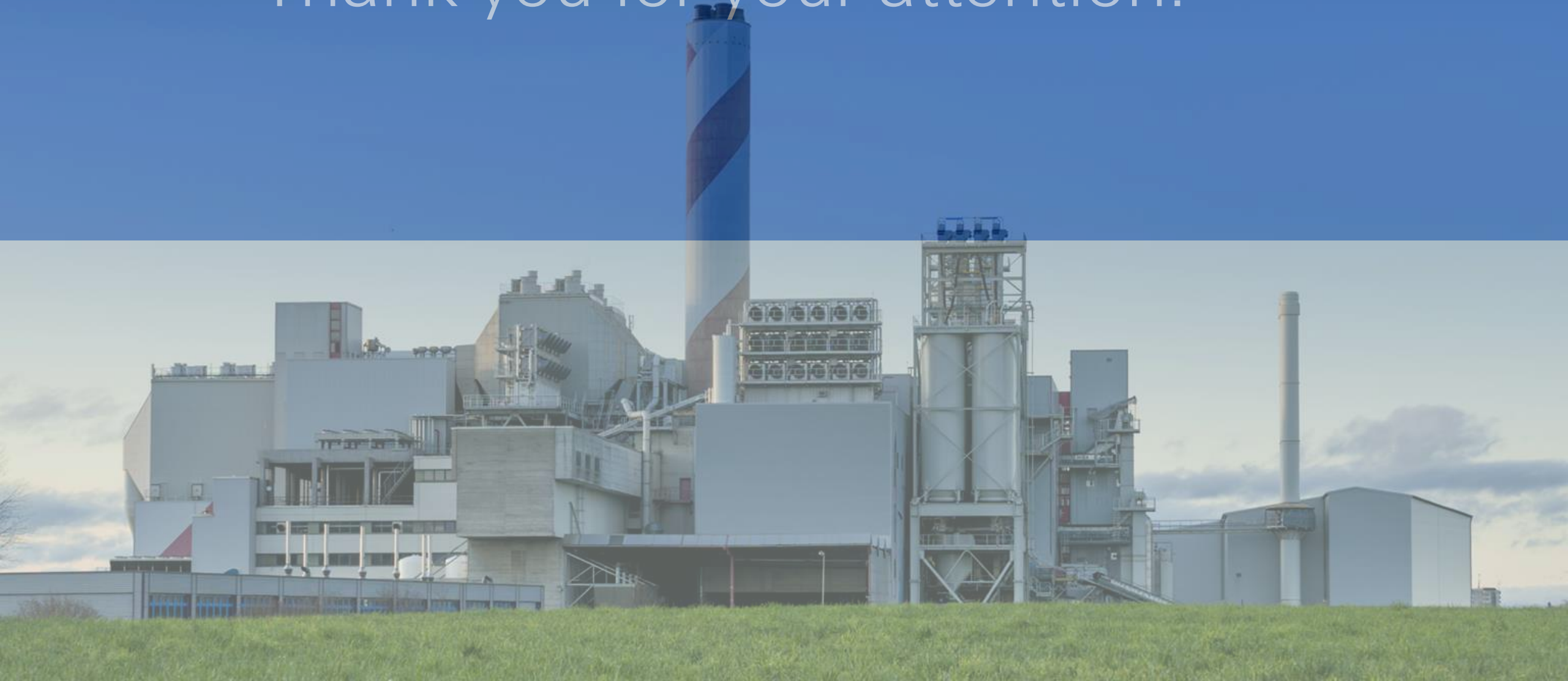
## The role of the Upstream Energy reinsurer



# Swiss Re

- ✓ Treaty market leader for Energy excess of loss treaties
- ✓ net capacity provider

Thank you for your attention!





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